## WHAT IS CLAIMED IS:

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1/ A method of regulating traffic in a transport system in which vehicles travel on a line provided with a plurality of stations at which passengers can board and alight, wherein the running of the vehicles is regulated as a function of the passenger load on said vehicles, said load being determined by measuring the weight of passengers present in the vehicles.

- 2/ A method of regulating traffic in a transport system according to claim 1, wherein the weight of passengers present in the vehicles is measured by means of load sensors equipping the bogies of the vehicles.
- 15 3/ A method of regulating traffic in a transport system according to claim 1, the method comprising the following steps:

monitoring the passenger load on the vehicles by measuring the weight of passengers in the vehicles;

detecting whether each vehicle is in an overloaded state by comparing the weight of passengers as measured with an overload threshold assigned to each vehicle; and

modifying the running of the vehicles traveling on the line by acting at each station at which an overloaded 25 vehicle arrives to reduce the time interval between the departure of the overloaded vehicle and the departure of the preceding vehicle.

- 4/ A method of regulating traffic according to claim 3, wherein the overload threshold corresponds to the weight of passengers for which the proximity between the people in the vehicle is such that the journey becomes uncomfortable.
- 35 5/ A method of regulating traffic according to claim 3, wherein, when no vehicle is in an overloaded state, the traffic is regulated as a function of time so that the

vehicles are separated by a constant time interval, the lapse of time for which the vehicles stop in the stations also being constant.

- 5 6/ A method of regulating traffic according to claim 4, wherein, when a vehicle is in an overloaded state at a station, the speed of said vehicle is accelerated to the next station so that it leaves said next station early relative to the initially scheduled time, the vehicle
  10 then being slowed down during its journey to the following station so as to leave said following station at the initially scheduled time.
- 7/ A method of regulating traffic according to claim 4,

  15 wherein, when a vehicle is in an overloaded state at a
  station, the lapse of time for which the vehicle
  preceding the overloaded vehicle stops is increased at
  the next station so that the vehicle leaves said next
  station late relative to the initially scheduled time,

  20 the speed of the vehicle then being increased during its
  journey to the following station so that it leaves said
  following station at the initially scheduled time.